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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,221	10/22/2003	Achim Buchholz	P-US-PR 1083	8255

7590 11/29/2004

Michael P. Leary
Black & Decker Corporation
Mail Stop TW 199
701 E. Joppa Rd.
Towson, MD 21286

EXAMINER

LOPEZ, MICHELLE

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/691,221	Applicant(s) BUCHHOLZ, ACHIM	
	Examiner Michelle Lopez	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1-11 in the reply filed on 10/22/04 is acknowledged.
2. Claims 12-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/22/04.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of a "solid piston" as claimed in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement

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Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because it is in claim format. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid et al. (4,537,264) in view of Winslow (2,422,327).

Schmid et al. discloses a powered hammer having a hammer housing; a hollow spindle 22 located in the housing; a hammering mechanism including a piston 24 reciprocating mounted within the spindle; the piston including at least one rearwardly extending piston arm via two parts of a bifurcated end portion 25 and a rearward protrusion as shown in Fig 6a, the piston arm and the protrusion defining a recess between the piston arm and the protrusion at the vicinity of 26; a wobble drive arrangement 4 drivingly connected to the piston; a trunnion arrangement

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drivingly connected between the piston and the wobble drive arrangement, the trunnion arrangement including a cross bolt 26.

With regards to claim 5, Schmid et al. discloses a through hole defined on the piston arm, wherein the cross bolt 26 is mounted through the through hole (see Fig. 6a).

With regards to claim 7, Schmid et al. discloses a wobble drive arrangement with a wobble pin 21, and the cross bolt 26 defines a radial through hole, and the wobble pin protrudes into the through hole.

With regards to claim 8, Schmid et al. discloses the wobble drive arrangement including a rotatably driven wobble sleeve 17, a wobble ring 20 mounted on the wobble sleeve, and a wobble pin 21 extending radially outwardly of the wobble ring for engaging the cross bolt 26.

With regards to claim 9, Schmid et al. discloses a ram 23, and that the piston is a hollow piston as shown in Fig. 2.

With regards to claim 10, Schmid et al discloses a solid piston as shown in Fig. 4.

With regards to claims 1 and 2, Schmid et al. does not disclose a washer partly located within the recess, fitting around the cross bolt and adjacent the piston, wherein the recesses is shaped so as to support the washer in an assembled position.

However, Winslow discloses a washer 5 partly located within a recess, fitting around a cross bolt 8 and adjacent a piston 10, wherein the recess is shaped so as to support the washer in an assembled position for the purpose of providing a resilient piston pin bushing. In view of Winslow, it would have been obvious to one having ordinary skill in the art to have provided a washer partly located within a recess and fitting around a cross bolt and adjacent a piston in order to provide a resilient piston pin bushing.

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With regards to claims 3 and 4, as shown in Figs. 2 and 3, Winslow also discloses that the piston protrusion defines an arcuate bearing surface supporting the cross bolt, wherein the washer 5 is supportable.

With regards to claim 6, Winslow also discloses that the washer 5 has a circular cutout aligned with the through hole.

With regards to claim 11, Schmid et al. as modified by Winslow does not disclose that the piston is made of aluminum, the cross bolt is made of steel and the washer is made of steel.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided a piston made of aluminum, a cross bolt made of steel and a washer made of steel, since it has been held to be within the general skill of a worker in the art to have select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. Therefore, it would have been obvious to one having ordinary skill in the art to have provided a piston made of aluminum, a cross bolt made of steel and a washer made of steel for the purpose of providing a piston coupling with a strength and hardness determined by the mechanical requirements needed for transferring of rotational force into a reciprocating force.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Curtis'934, Dick'959, Brill'340, Molle'614, Bleicher'931, and Schmid'259 are cited to show related inventions.


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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Lopez whose telephone number is 571-272-4464. The examiner can normally be reached on Monday - Thursday: 8:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML



JOHN SIPOS
PRIMARY EXAMINER